

=> d his

(FILE 'HOME' ENTERED AT 14:08:42 ON 20 APR 2005)

FILE 'CPLUS' ENTERED AT 14:09:00 ON 20 APR 2005

L1 0 S (?PROPYN? OR ?BUTYN?) (L) (HYPOHALI? (L) RADICAL?) (L) OXIDA?
L2 1 S (?PROPYN? OR ?BUTYN?) (L) (HYPOHALI? (L) RADICAL?)
L3 4 S OXIDA? (L) (HYPOHALI? (L) RADICAL?) (L) CARBOXYL?

L3 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:150421 CAPLUS

DN 138:172129

TI Making carboxylated cellulose fibers and paper products

IN Jewell, Richard A.; Komen, Joseph Lincoln; Su, Bing; Weerawarna, S. Ananda; Li, Yong

PA Weyerhaeuser Company, USA

SO U.S., 23 pp., Cont.-in-part of U.S. 6,379,494.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6524348	B1	20030225	US 2000-641276	20000817
	US 6379494	B1	20020430	US 1999-418909	19991015
PRAI	US 1999-272137	B2	19990319		
	US 1999-418909	A2	19991015		

OS MARPAT 138:172129

RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB The title method of making **carboxylated** cellulose fibers whose fiber strength and d.p. is not significantly sacrificed comprises oxidation and stabilized stages. The title method involves the use of cyclic nitroxide free **radical** compds. as a primary **oxidant** and a **hypohalite** salt as a secondary **oxidant** in an aqueous environment. Preferably the oxidized cellulose is then stabilized against D.P. loss in alkaline environments and color reversion with a reducing agent such as Na borohydride. Alternatively it may be treated with an tertiary **oxidant** such as Na chlorite. The method results in a high percentage of **carboxyl** groups located at the fiber surface. The product is especially useful as a papermaking fiber where it contributes strength and has a higher attraction for cationic additives. The product is also useful as an additive to recycled fiber to increase strength. The method can be used to improve properties of either virgin or recycled fiber. It does not require high α -cellulose fiber but is suitable for regular market pulps.

L3 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2002:327792 CAPLUS

DN 136:342435

TI Method of making carboxylated cellulose fibers and products of the method

IN Jewell, Richard A.; Komen, Joseph Lincoln; Li, Yong; Su, Bing

PA Weyerhaeuser Company, USA

SO U.S., 18 pp., Cont.-in-part of U.S. Ser. No. 272,137.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6379494	B1	20020430	US 1999-418909	19991015
	US 6524348	B1	20030225	US 2000-641276	20000817
	CA 2384701	AA	20010426	CA 2000-2384701	20001006
	WO 2001029309	A1	20010426	WO 2000-US27837	20001006

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,

DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
 CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 EP 1238142 A1 20020911 EP 2000-970682 20001006
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL
 JP 2003512540 T2 20030402 JP 2001-532283 20001006
 PRAI US 1999-272137 A2 19990319
 US 1999-418909 A2 19991015
 WO 2000-US27837 W 20001006

RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB The invention is directed to a method of making **carboxylated** cellulose fibers whose fiber strength and d.p. is not significantly sacrificed. The method involves the use of TEMPO (2,2,6,6-tetramethylpiperidinyloxy free **radical**) as a primary **oxidant** and a **hypohalite** salt as a secondary **oxidant** in an aqueous environment. Preferably the oxidized cellulose is then stabilized against D.P. loss in alkaline environments and color reversion with a reducing agent such as sodium borohydride. Alternatively it may be treated with an **oxidant** such as sodium chlorite. The method results in a high percentage of **carboxyl** groups located at the fiber surface. The product is especially useful as a papermaking fiber where it contributes strength and has a higher attraction for cationic additives. The product is also useful as an additive to recycled fiber to increase strength. The method can be used to improve properties of either virgin or recycled fiber. It does not require high α -cellulose fiber but is suitable for regular market pulps.

L3 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2001:300943 CAPLUS
 DN 134:312682
 TI Method of making carboxylated cellulose fibers and products
 IN Jewell, Richard A.; Komen, Joseph Lincoln; Su, Bing; Weerawarna, S.
 Ananda; Li, Yong
 PA Weyerhaeuser Company, USA
 SO PCT Int. Appl., 52 pp.
 CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001029309	A1	20010426	WO 2000-US27837	20001006
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 6379494	B1	20020430	US 1999-418909	19991015
	CA 2384701	AA	20010426	CA 2000-2384701	20001006
	EP 1238142	A1	20020911	EP 2000-970682	20001006
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
	JP 2003512540	T2	20030402	JP 2001-532283	20001006
PRAI	US 1999-418909	A	19991015		
	US 1999-272137	A2	19990319		
	WO 2000-US27837	W	20001006		

OS MARPAT 134:312682

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB A method of making highly **carboxylated** cellulose fibers whose fiber strength and d.p. is not significantly sacrificed comprises (1) oxidizing the cellulose fiber (kraft pulp) with a cyclic nitroxide free **radical** compound as a primary **oxidant** and a **hypohalite** salt as a secondary **oxidant** under aqueous alkaline conditions; and (2) treating the oxidized cellulose against d.p. loss in aqueous suspension with a stabilizing agent selected from the group consisting of reducing agent and tertiary oxidizing agent. The product is especially useful as a papermaking fiber where it contributes strength and has a higher attraction for cationic additives, and it is also useful as an additive to recycled fiber to increase strength.

L3 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1940:740 CAPLUS
DN 34:740
OREF 34:116h-i
TI Carbocyclic acids of the cyclopentanopolyhydrophenanthrene series
IN Bockmuhl, Max; Ehrhart, Gustav; Ruschig, Heinrich
PA Winthrop Chemical Co.
DT Patent
LA Unavailable
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2171959		19390905	US	
AB	Compds. such as acetoxy pregnenolones, by oxidation of their acetyl radicals with an oxidizing agent such as a hypohalite or chromic acid, yield carboxylic acids of white crystalline character, insol. in water, soluble in alc. and which may be used as intermediates for further synthesis. Several examples with details of procedure are given.				

=> s oxida?(1)hypohali?(1)carboxyl?
 708333 OXIDA?
 939 HYPOHALI?
 368775 CARBOXYL?
 L5 9 OXIDA?(L)HYPOHALI?(L)CARBOXYL?

=> s 15 not 13
 L6 5 L5 NOT L3

=> d bib hit 1-5

L6 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2002:330256 CAPLUS
 DN 136:340395
 TI Oxidative process and catalysts for the preparation of unsaturated carboxylic acids from the corresponding unsaturated aldehydes
 IN Chandalia, S. B.; Chandnani, Kavita; Srivastava, Sangeeta
 PA Somaiya Organo Chemicals Limited, India
 SO Eur. Pat. Appl., 4 pp.
 CODEN: EPXXDW

DT Patent
 LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1201637	A2	20020502	EP 2001-309022	20011024
	EP 1201637	A3	20030219		
	EP 1201637	B1	20050316		
		R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
	US 2002072627	A1	20020613	US 2001-982099	20011019
PRAI	IN 2000-MU957	A	20001025		
OS	CASREACT 136:340395				
IT	Alkali metal compounds				
	RL: RCT (Reactant); RGT (Reagent); RACT (Reactant or reagent) (alkali metal hypohalites ; oxidants for the preparation of unsatd. carboxylic acids from the corresponding unsatd. aldehydes)				

L6 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1997:697180 CAPLUS
 DN 127:307619

TI Oxidation of sugars with **hypohalides** in preparation of **carboxylates** used in detergents formulation

IN Fleche, Guy
 PA Fleche, Guy, Fr.
 SO Can. Pat. Appl., 27 pp.
 CODEN: CPXXEB

DT Patent
 LA French

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CA 2193034	AA	19970622	CA 1996-2193034	19961216
	FR 2742755	A1	19970627	FR 1995-15269	19951221
	FR 2742755	B1	19980220		
	NO 9605268	A	19970623	NO 1996-5268	19961210
	NO 307886	B1	20000613		
	US 5831043	A	19981103	US 1996-769050	19961218
	EP 798310	A1	19971001	EP 1996-402823	19961219
	EP 798310	B1	20020424		
		R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI			

AT 216703 E 20020515 AT 1996-402823 19961219
ES 2176420 T3 20021201 ES 1996-402823 19961219
JP 09235291 A2 19970909 JP 1996-341791 19961220
PRAI FR 1995-15269 A 19951221

TI **Oxidation of sugars with hypohalides in preparation of carboxylates used in detergents formulation**

L6 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1993:472482 CAPLUS

DN 119:72482

TI Preparation of α,β -epoxy carboxylic acids from α,β -unsaturated carboxylic acids

IN Moriwaki, Yoichiro; Akaishi, Ryoichi

PA Osaka Juki Kagaku Kogyo Kk, Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 05039277	A2	19930219	JP 1991-196519	19910806
	JP 2892866	B2	19990517		
PRAI	JP 1991-196519		19910806		
OS	CASREACT 119:72482; MARPAT 119:72482				

IT **Oxidation**
(of α,β -unsatd. carboxylic acids, by
hypohalites)

L6 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1968:39503 CAPLUS

DN 68:39503

TI Hypohalite-induced oxidative decarboxylation of α -amino acids

AU Van Tamelen, Eugene E.; Haarstad, Vernon B.; Orvis, Roy L.

CS Univ. of Wisconsin, Madison, WI, USA

SO Tetrahedron (1967), 24(2), 687-704

CODEN: TETRAB; ISSN: 0040-4020

DT Journal

LA English

AB As a model for certain in vivo alkaloid transformations and as a possible means for the preparation of specific enamines, the **hypohalite** -induced **oxidative** decarboxylation of various primary, secondary and tertiary α -amino acids was studied. The following reactions were observed: (1) N,N-dimethylglycine \rightarrow N-chlorodimethylamine; (2) N-methyl-pipecolic acid \rightarrow N-methyl- Δ 2-piperideine dimer; (3) quinolizidine-4-carboxylic acid \rightarrow Δ 5,10 dehydroquinolizidine-4-carboxylic acid; (4) 2-methyltryptophan \rightarrow 4-acetylquinoline; (5) kynurenine (I) \rightarrow kynurine (II); (6) 2,3,4,5-tetrahydro- β -carboline-4- carboxylic acid \rightarrow norharman; (7) 3-methyl-2,3,4,5-tetrahydro- β -carboline-4- carboxylic acid \rightarrow mono- and dichloro-3-methyliso- β - carbolines and a dichloro spiro lactam oxindole. The mechanisms of certain of these changes are discussed. 25 references.

L6 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1937:42591 CAPLUS

DN 31:42591

OREF 31:5949e-f

TI Polyhydroxycarboxylic acids and their salts

IN Finkelstein, Maria

DT Patent

LA Unavailable

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI GB 462565		19370311	GB	
AB				
the				
Mn,				

These are obtained by **oxidation** of trihexosan in alkaline solution with, e. g., a permanganate, halogen, **hypohalite** or H₂O₂. Mono- or di-**carboxylic** acids are obtained according to the amount of oxidizing agent used. They may be precipitated as basic Ba salts from which free acids or other salts, e. g., the soluble neutral alkaline earth, Fe, Cu, Ni and Ag salts, can be prepared. The compds. have a therapeutic use.

d his

(FILE 'HOME' ENTERED AT 14:08:42 ON 20 APR 2005)

FILE 'CPLUS' ENTERED AT 14:09:00 ON 20 APR 2005

L1 0 S (?PROPYN? OR ?BUTYN?) (L) (HYPOHALI? (L) RADICAL?) (L) OXIDA?
L2 1 S (?PROPYN? OR ?BUTYN?) (L) (HYPOHALI? (L) RADICAL?)
L3 4 S OXIDA? (L) (HYPOHALI? (L) RADICAL?) (L) CARBOXYL?
L4 2 S OXIDA? (L) (HYPOHALI? (L) ?OXIDE) (L) CARBOXYL?
L5 9 S OXIDA? (L) HYPOHALI? (L) CARBOXYL?
L6 5 S L5 NOT L3

=> s oxida? (p) hypohali? (p) carboxyl?
708333 OXIDA?
939 HYPOHALI?
368775 CARBOXYL?
L7 9 OXIDA? (P) HYPOHALI? (P) CARBOXYL?

=> s hypohali? (l) ?tempo (l) nitrox?
939 HYPOHALI?
3402 ?TEMPO
13208 NITROX?
L8 3 HYPOHALI? (L) ?TEMPO (L) NITROX?

=> d bib hit 1-3

L8 ANSWER 1 OF 3 CPLUS COPYRIGHT 2005 ACS on STN
AN 2004:159015 CPLUS
DN 140:199022
TI Procedure for the production of alkynecarboxylic acids by the oxidation of alkynyl alcohols with hypohalites in the presence of a nitroxyl compound
IN Stohrer, Juergen; Fritz-Langhals, Elke; Bruenninghaus, Christian
PA Consortium fuer Elektrochemische Industrie G.m.b.H., Germany
SO Ger., 11 pp.
CODEN: GWXXAW

DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10244633	B3	20040226	DE 2002-10244633	20020925
	EP 1403240	A1	20040331	EP 2003-20442	20030911
	EP 1403240	B1	20040721		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK AT 271533	E	20040815	AT 2003-20442	20030911
	US 2004059154	A1	20040325	US 2003-667810	20030922
	JP 2004115519	A2	20040415	JP 2003-331417	20030924
PRAI	DE 2002-10244633	A	20020925		
OS	CASREACT 140:199022				

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB Alkynecarboxylic acids (e.g., propargylic acid) are prepared in high yield and selectivity by the oxidation of an alkynyl alc. (e.g., propargylic alc.) with a **hypohalite** (e.g., sodium hypochlorite) in the presence of a **nitroxyl** compound (e.g., 4-hydroxy-**TEMPO**) at a pH value >7 by continuous addition of the alkynyl alc. and the hypohalogenite to the reaction mixture
IT 2226-96-2, 4-Hydroxy-**TEMPO**
RL: CAT (Catalyst use); USES (Uses)
(in a procedure for the production of alkynecarboxylic acids by the oxidation
of alkynyl alcs. with **hypohalites** in the presence of a

IT 14691-89-5, 4-Acetamido-**TEMPO**
 RL: CAT (Catalyst use); USES (Uses)
 (procedure for the production of alkyne carboxylic acids by the oxidation of alkynyl alcs. with **hypohalites** in the presence of a **nitroxyl** compound)

L8 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1999:49253 CAPLUS
 DN 130:97117
 TI Manufacture of tricarboxy starch
 IN Shinpo, Masafumi; Sakaiya, Hisashi; Sumitani, Makoto
 PA Mitsubishi Gas Chemical Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 4 pp.
 CODEN: JKXXAF

DT Patent
 LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 11012301	A2	19990119	JP 1997-164284	19970620
PRAI JP 1997-164284		19970620		

AB Title materials, useful for scale inhibitors, pigment dispersants, sizing agents, concrete admixt., and detergent builders, etc., are manufactured by tow-step oxidation of starch with **hypohalites** in the presence of **nitroxyl** compds. and then with peroxides in the presence of catalysts. Thus, corn starch was oxidized with NaOCl in the presence of **TEMPO** and further oxidized with H2O2 in the presence of K5PTi2W10040 to give tricarboxy starch having CO2H content apprx. 100% at 6 position and 31% at 2- and 3-position of glycopyranose units.

IT 2564-83-2, **TEMPO** 7681-52-9, Sodium hypochlorite 7722-84-1, Hydrogen peroxide, uses

RL: NUU (Other use, unclassified); USES (Uses)
 (manufacture of tricarboxy starch by oxidation with **hypohalites**, **nitroxyl** compds., and peroxides)

L8 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 1997:805822 CAPLUS
 DN 128:49880

TI Method for cleaning items in particular filters used during foodstuff production
 IN Mol, Martinus Nicolaas Maria; Van Hoof, Stephan Cornelus Johannes Maria
 PA Heineken Technical Services B.V., Neth.; LHS Micro-Filtrations B.V.; Mol, Martinus Nicolaas Maria; Van Hoof, Stephan Cornelus Johannes Maria
 SO PCT Int. Appl., 11 pp.
 CODEN: PIXXD2

DT Patent
 LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9745523	A1	19971204	WO 1997-NL294	19970526
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
NL 1003225	C2	19971203	NL 1996-1003225	19960529
CA 2256528	AA	19971204	CA 1997-2256528	19970526
AU 9729155	A1	19980105	AU 1997-29155	19970526

AU 717265	B2	20000323		
EP 912701	A1	19990506	EP 1997-923333	19970526
EP 912701	B1	20021127		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO				
CN 1226922	A	19990825	CN 1997-196870	19970526
BR 9709282	A	20000111	BR 1997-9282	19970526
JP 2000511218	T2	20000829	JP 1997-542085	19970526
IL 127318	A1	20010520	IL 1997-127318	19970526
EP 1260576	A2	20021127	EP 2002-77124	19970526
EP 1260576	A3	20031015		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, AL				
AT 228560	E	20021215	AT 1997-923333	19970526
RU 2197516	C2	20030127	RU 1998-123593	19970526
PT 912701	T	20030228	PT 1997-923333	19970526
ES 2188942	T3	20030701	ES 1997-923333	19970526
CZ 293661	B6	20040616	CZ 1998-3922	19970526
NO 9805602	A	19990118	NO 1998-5602	19981130
MX 9810053	A	20000131	MX 1998-10053	19981130
KR 2000016193	A	20000325	KR 1998-709761	19981130
BG 63977	B1	20030829	BG 1998-102972	19981201
US 6274186	B1	20010814	US 1999-194692	19990322
PRAI NL 1996-1003225	A	19960529		
EP 1997-923333	A3	19970526		
WO 1997-NL294	W	19970526		

AB In the title method, a cleaning system based on the combination of a cyclic **nitroxyl** compound and a **hypohalite** is used for cleaning apparatus used during the production of foodstuffs, e.g., filters of brewing apparatus for improving the removal of contaminants and the recovery of flux. A solution containing 4.5 g/L HOCl, 35 mg/L NaBr and 15 mg/L **TEMPO** was used in cleaning of filter for settled beer.

=> d his

(FILE 'HOME' ENTERED AT 14:08:42 ON 20 APR 2005)

FILE 'CAPLUS' ENTERED AT 14:09:00 ON 20 APR 2005

L1	0 S (?PROPYN? OR ?BUTYN?) (L) (HYPOHALI? (L) RADICAL?) (L) OXIDA?
L2	1 S (?PROPYN? OR ?BUTYN?) (L) (HYPOHALI? (L) RADICAL?)
L3	4 S OXIDA? (L) (HYPOHALI? (L) RADICAL?) (L) CARBOXYL?
L4	2 S OXIDA? (L) (HYPOHALI? (L) ?OXIDE) (L) CARBOXYL?
L5	9 S OXIDA? (L) HYPOHALI? (L) CARBOXYL?
L6	5 S L5 NOT L3
L7	9 S OXIDA? (P) HYPOHALI? (P) CARBOXYL?
L8	3 S HYPOHALI? (L) ?TEMPO (L) NITROX?

=> s hypohali?(l)?tempo(l)carboxy?

939 HYPOHALI?

3402 ?TEMPO

517253 CARBOXY?

L9 4 HYPOHALI? (L) ?TEMPO (L) CARBOXY?

=> s 19 not 18

L10 4 L9 NOT L8

=> d bib hit 1-4

L10 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:660459 CAPLUS

TI Production of nanoscopic polymer rods from cellulose microcrystal templates

AU Harrisson, Simon; Malmstrom, Eva; Hult, Anders; Hawker, Craig J.; Wooley, Karen L.
 CS Center for Materials Innovation and Department of Chemistry, Washington University in St Louis, St Louis, MO, 63130-4899, USA
 SO Abstracts of Papers, 228th ACS National Meeting, Philadelphia, PA, United States, August 22-26, 2004 (2004), PMSE-578 Publisher: American Chemical Society, Washington, D. C.
 CODEN: 69FTZ8
 DT Conference; Meeting Abstract
 LA English
 AB Nanoscale polymeric rods have been produced by grafting polymers of controlled mol. weight and varying compns. to cellulose microcrystals. The grafting was accomplished via carbodiimide-mediated formation of an amide linkage between polymers carrying a terminal amine functionality, prepared by atom transfer radical polymerization, and **carboxylic** acid groups on the surface of the cellulose microcrystals which were formed by **TEMPO**-mediated **hypohalite** oxidation. The resulting rods formed stable suspensions in organic solvents and have been characterized by atomic force microscopy and transmission electron microscopy, as well as spectroscopic techniques. The approach lends itself to the production of a variety of nanoscopic rods of controlled size and functionality.

L10 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2002:327792 CAPLUS
 DN 136:342435
 TI Method of making carboxylated cellulose fibers and products of the method
 IN Jewell, Richard A.; Komen, Joseph Lincoln; Li, Yong; Su, Bing
 PA Weyerhaeuser Company, USA
 SO U.S., 18 pp., Cont.-in-part of U.S. Ser. No. 272,137.
 CODEN: USXXAM

DT Patent
 LA English

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6379494	B1	20020430	US 1999-418909	19991015
	US 6524348	B1	20030225	US 2000-641276	20000817
	CA 2384701	AA	20010426	CA 2000-2384701	20001006
	WO 2001029309	A1	20010426	WO 2000-US27837	20001006
		W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
		RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	EP 1238142	A1	20020911	EP 2000-970682	20001006
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
	JP 2003512540	T2	20030402	JP 2001-532283	20001006
PRAI	US 1999-272137	A2	19990319		
	US 1999-418909	A2	19991015		
	WO 2000-US27837	W	20001006		

RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB The invention is directed to a method of making **carboxylated** cellulose fibers whose fiber strength and d.p. is not significantly sacrificed. The method involves the use of **TEMPO** (2,2,6,6-tetramethylpiperidinyloxy free radical) as a primary oxidant and a **hypohalite** salt as a secondary oxidant in an aqueous environment. Preferably the oxidized cellulose is then stabilized against D.P. loss in

alkaline environments and color reversion with a reducing agent such as sodium borohydride. Alternatively it may be treated with an oxidant such as sodium chlorite. The method results in a high percentage of **carboxyl** groups located at the fiber surface. The product is especially useful as a papermaking fiber where it contributes strength and has a higher attraction for cationic additives. The product is also useful as an additive to recycled fiber to increase strength. The method can be used to improve properties of either virgin or recycled fiber. It does not require high α -cellulose fiber but is suitable for regular market pulps.

L10 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2001:868457 CAPLUS
 DN 136:5852
 TI New process for the preparation of vinyl-pyrrolidinone cephalosporin derivatives
 IN Hebeisen, Paul; Hilpert, Hans; Humm, Roland
 PA Basilea Pharmaceutica A.-G., Switz.
 SO PCT Int. Appl., 33 pp.
 CODEN: PIXXD2

DT Patent
 LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001090111	A1	20011129	WO 2001-EP5721	20010518
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CO, CU, CZ, DE, DK, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 2002019381	A1	20020214	US 2001-860157	20010517
	US 6504025	B2	20030107		
	CA 2408941	AA	20011129	CA 2001-2408941	20010518
	EP 1289998	A1	20030312	EP 2001-936374	20010518
	EP 1289998	B1	20050330		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	JP 2003535059	T2	20031125	JP 2001-586298	20010518
	EP 1435357	A2	20040707	EP 2004-2120	20010518
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
PRAI	EP 2000-111164	A	20000524		
	EP 2001-936374	A3	20010518		
	WO 2001-EP5721	W	20010518		
OS	CASREACT 136:5852; MARPAT 136:5852				

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB A process for preparing pharmaceutic compns., a vinyl-pyrrolidinone cephalosporin derivative of I via the acylation of deacetyl-7-aminocephalosporanic acid with II (R1 = a hydroxy protecting group; Y1-Y3 = an activating group) in base followed by the protection of the **carboxylic** acid group, formation of an aldehyde at C3 using an inorg. **hypohalite** in **TEMPO** or with MnO₂, and reacting the aldehyde with III (R = an amino protecting group or group A), was accomplished. I can be used for the treatment and prophylaxis of infectious diseases, especially infectious diseases caused by bacterial pathogens in particular methicillin resistant *Staphylococcus aureus* (MRSA) and *Pseudomonas aeruginosa* (no data).

L10 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1997:697180 CAPLUS

DN 127:307619

TI Oxidation of sugars with hypohalides in preparation of carboxylates used in detergents formulation

IN Fleche, Guy

PA Fleche, Guy, Fr.

SO Can. Pat. Appl., 27 pp.

CODEN: CPXXEB

DT Patent

LA French

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CA 2193034	AA	19970622	CA 1996-2193034	19961216
	FR 2742755	A1	19970627	FR 1995-15269	19951221
	FR 2742755	B1	19980220		
	NO 9605268	A	19970623	NO 1996-5268	19961210
	NO 307886	B1	20000613		
	US 5831043	A	19981103	US 1996-769050	19961218
	EP 798310	A1	19971001	EP 1996-402823	19961219
	EP 798310	B1	20020424		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI				
	AT 216703	E	20020515	AT 1996-402823	19961219
	ES 2176420	T3	20021201	ES 1996-402823	19961219
	JP 09235291	A2	19970909	JP 1996-341791	19961220

PRAI FR 1995-15269 A 19951221

AB Alkaline oxidation of sugars with **hypohalides** in presence of **TEMPO** gave the corresponding **carboxylates** as detergents. Thus, oxidation of sorbitol in water with hydrochloric acid in presence of **TEMPO** gave the corresponding glucaric acid in 33% yield. These **carboxylates** were used in detergents formulation with a whiteness higher than polyacrylates.

IT 2564-83-2, **TEMPO**

RL: CAT (Catalyst use); USES (Uses)

(oxidation of sugars with **hypohalides** in preparation of **carboxylates** as detergents)

=> d his

(FILE 'HOME' ENTERED AT 14:08:42 ON 20 APR 2005)

FILE 'CAPLUS' ENTERED AT 14:09:00 ON 20 APR 2005

L1 0 S (?PROPYN? OR ?BUTYN?) (L) (HYPOHALI? (L) RADICAL?) (L) OXIDA?
L2 1 S (?PROPYN? OR ?BUTYN?) (L) (HYPOHALI? (L) RADICAL?)
L3 4 S OXIDA? (L) (HYPOHALI? (L) RADICAL?) (L) CARBOXYL?
L4 2 S OXIDA? (L) (HYPOHALI? (L) ?OXIDE) (L) CARBOXYL?
L5 9 S OXIDA? (L) HYPOHALI? (L) CARBOXYL?
L6 5 S L5 NOT L3
L7 9 S OXIDA? (P) HYPOHALI? (P) CARBOXYL?
L8 3 S HYPOHALI? (L) ?TEMPO (L) NITROX?
L9 4 S HYPOHALI? (L) ?TEMPO (L) CARBOXY?
L10 4 S L9 NOT L8

=> s (hypohali?(l)nitrox?(l)carboxy?) and alcohol?

939 HYPOHALI?
13208 NITROX?
517253 CARBOXY?
5 HYPOHALI? (L) NITROX? (L) CARBOXY?
380300 ALCOHOL?

L11 1 (HYPOHALI? (L) NITROX? (L) CARBOXY?) AND ALCOHOL?

=> d bib abs hit

L11 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:159015 CAPLUS
DN 140:199022
TI Procedure for the production of alkynecarboxylic acids by the oxidation of alkynyl **alcohols** with hypohalites in the presence of a nitroxyl compound

IN Stohrer, Juergen; Fritz-Langhals, Elke; Bruenninghaus, Christian
PA Consortium fuer Elektrochemische Industrie G.m.b.H., Germany
SO Ger., 11 pp.

CODEN: GWXXAW

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10244633	B3	20040226	DE 2002-10244633	20020925
	EP 1403240	A1	20040331	EP 2003-20442	20030911
	EP 1403240	B1	20040721		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	AT 271533	E	20040815	AT 2003-20442	20030911
	US 2004059154	A1	20040325	US 2003-667810	20030922
	JP 2004115519	A2	20040415	JP 2003-331417	20030924
PRAI	DE 2002-10244633	A	20020925		

OS CASREACT 140:199022

AB Alkynecarboxylic acids (e.g., propargylic acid) are prepared in high yield and selectivity by the oxidation of an alkynyl alc. (e.g., propargylic alc.) with a hypohalite (e.g., sodium hypochlorite) in the presence of a nitroxyl compound (e.g., 4-hydroxy-TEMPO) at a pH value >7 by continuous addition of the alkynyl alc. and the hypohalogenite to the reaction mixture

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

TI Procedure for the production of alkynecarboxylic acids by the oxidation of alkynyl **alcohols** with hypohalites in the presence of a nitroxyl compound

IT **Alcohols**, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)

(propargyl; procedure for the production of alkyne carboxylic acids by the oxidation of alkynyl alcs. with hypohalites in the presence of a nitroxyl compound)

IT **Carboxylic acids, preparation**

RL: SPN (Synthetic preparation); PREP (Preparation)

(unsatd., alkyne carboxylic acids; procedure for the production of alkyne carboxylic acids by the oxidation of alkynyl alcs. with hypohalites in the presence of a nitroxyl compound)

IT 107-19-7, Propargyl alcohol 110-65-6, 2-Butyne-1,4-diol

764-01-2, 2-Butyn-1-ol

RL: RCT (Reactant); RACT (Reactant or reagent)

(procedure for the production of alkyne carboxylic acids by the oxidation of alkynyl alcs. with hypohalites in the presence of a nitroxyl compound)

(FILE 'HOME' ENTERED AT 14:08:42 ON 20 APR 2005)

FILE 'CPLUS' ENTERED AT 14:09:00 ON 20 APR 2005

L1 0 S (?PROPYN? OR ?BUTYN?) (L) (HYPOHALI?(L)RADICAL?) (L)OXIDA?
L2 1 S (?PROPYN? OR ?BUTYN?) (L) (HYPOHALI?(L)RADICAL?)
L3 4 S OXIDA?(L) (HYPOHALI?(L)RADICAL?) (L)CARBOXYL?
L4 2 S OXIDA?(L) (HYPOHALI?(L)?OXIDE) (L)CARBOXYL?
L5 9 S OXIDA?(L)HYPOHALI?(L)CARBOXYL?
L6 5 S L5 NOT L3
L7 9 S OXIDA?(P)HYPOHALI?(P)CARBOXYL?
L8 3 S HYPOHALI?(L)?TEMPO(L)NITROX?
L9 4 S HYPOHALI?(L)?TEMPO(L)CARBOXY?
L10 4 S L9 NOT L8
L11 1 S (HYPOHALI?(L)NITROX?(L)CARBOXY?) AND ALCOHOL?

=> s (hypohali?(l)nitrox?) and alcohol?

939 HYPOHALI?
13208 NITROX?
11 HYPOHALI?(L)NITROX?
380300 ALCOHOL?

L12 2 (HYPOHALI?(L)NITROX?) AND ALCOHOL?

=> s l11 not l12

L13 0 L11 NOT L12

=> s l12 not l11

L14 1 L12 NOT L11

=> d bib abs hit

L14 ANSWER 1 OF 1 CPLUS COPYRIGHT 2005 ACS on STN
AN 2002:574994 CPLUS
DN 137:126809
TI Stable free nitroxyl radicals as oxidation catalysts and process for
oxidation
IN Zedda, Alessandro; Sala, Massimiliano; Schneider, Armin
PA Ciba Specialty Chemicals Holding Inc., Switz.; Ciba Specialty Chemicals
S.P.A.
SO PCT Int. Appl., 16 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

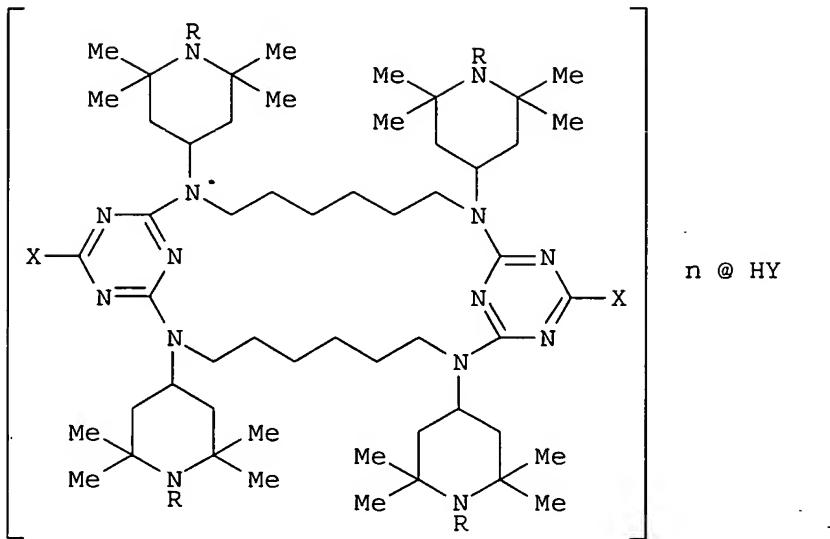
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002058844	A1	20020801	WO 2002-EP340	20020115
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA	2429490	AA	20020801	CA 2002-2429490	20020115
EP	1353750	A1	20031022	EP 2002-715433	20020115
EP	1353750	B1	20040825		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				

JP 2004524296
 AT 274374
 US 2004063932
 PRAI EP 2001-810059
 WO 2002-EP340
 OS MARPAT 137:126809
 GI

T2 20040812
 E 20040915
 A1 20040401
 A 20010123
 W 20020115

JP 2002-559170
 AT 2002-715433
 US 2003-466726

20020115
 20020115
 20030718



AB Invention relates to stable free nitroxyl radicals of formula (I) at least one of the substituents R = O and the others are H or OH; X = NR₁R₂, wherein R₁ and R₂ = H, C₁-18alkyl or together with the N atom to which they are bound from a 5 or 6 membered ring which may be further interrupted by an O atom, HY = an organic or inorg. acid, and n = 0 or 1-4. Further subjects of the invention are an oxidation process for alcs. to aldehydes or ketones or to carboxylic acids in the presence of a compds. I which are used as oxidation catalysts. Thus, 50 g Chimassorb 966, 250 mL toluene, 42 g potassium carbonate, and 72.5 g peracetic acid in acetic acid were allowed to stand for 2 h at 5-10°, 10 g potassium carbonate was added, the mixture was agitated at 25-30° for 2 h, and it was agitated at 50° for 1 h to give a rose-colored product showing m.p. 267-270° and nirtoxy yield by ESR 95%, 0.072 g of which was mixed with 2.5 g 2-octanol, 2.8 g KHCO₂, and 10 mL dichloromethane at 10-15°, and 13.8 g 10.5% NaOCl aqueous solution was added to give 2-octanone.

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

IT Hypohalites

RL: RCT (Reactant); RACT (Reactant or reagent)
 (alkali salts, oxidizing agents; stable free **nitroxyl**
 radicals as oxidation catalysts and process for oxidation)

IT Alcohols, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)
 (stable free nitroxyl radicals as oxidation catalysts and process for
 oxidation)